

What is claimed is:

10055555-542902

1. A channel selection device used in a digital/analog broadcasting receiver comprising, a receiver for receiving an encoded digital/analog broadcasting signal originated from a broadcasting station, a digital/analog decoder for decoding the digital/analog broadcasting signal received from the receiver and then outputting the signal to a display device for displaying an image, a memory for storing channel information contained in the broadcasting signal decoded by the digital decoder, a control unit for controlling the sections of the receiver, and an input device for inputting a user's instruction for channel selection to the control unit, wherein the device receives a digital broadcast and an analog broadcast which are originated through different channels, the digital broadcast has, in one main channel, one or a plurality of sub-channels for originating contents therethrough, the sub-channels are assigned virtual channels headed by the same channel number as the main channel in the analog broadcast and the control unit controls the device such that the receiver receives the broadcasting signal of a selected channel upon reception of the channel selection instruction from the input device, and the digital decoder decodes the received broadcasting signal, in order to obtain the channel information contained in the decoded broadcasting signal and then store the channel information in the memory; characterized in that,

the input device includes an UP/DOWN key for instructing the control unit to select a sub-channel adjacent in upward/downward

direction in the same main channel,

the control unit references the channel information stored in the memory to thereby select an upward/downward adjacent sub-channel in the main channel through which a broadcast is being received currently, each time the UP/DOWN key is operated;

selects a sub-channel having the largest sub-channel number, when receiving the instruction by the UP key and not finding an upward adjacent channel in the main channel with reference to the channel information,

selects a sub-channel having the smallest sub-channel number, when receiving the instruction by the DOWN key and not finding a downward adjacent channel in the main channel with reference to the channel information.

2. A channel selection device used in a digital/analog broadcasting receiver comprising, a receiver for receiving an encoded digital/analog broadcasting signal originated from a broadcasting station, a digital/analog decoder for decoding the digital/analog broadcasting signal received from the receiver and then outputting the signal to a display device for displaying an image, a memory for storing channel information contained in the broadcasting signal decoded by the digital decoder, a control unit for controlling the sections of the receiver, and an input device for inputting a user's instruction for channel selection to the control unit, wherein the device receives a digital broadcast and an analog broadcast which are originated through different channels, the digital broadcast has, in

one main channel, one or a plurality of sub-channels for originating contents therethrough, the sub-channels are assigned virtual channels headed by the same channel number as the main channel in the analog broadcast, and the control unit controls the device such that the receiver receives the broadcasting signal of a selected channel upon reception of the channel selection instruction from the input device and the digital decoder decodes the received broadcasting signal, in order to obtain the channel information contained in the decoded broadcasting signal and then store the channel information in the memory; characterized in that,

the input device includes an operation key for instructing the control unit to select a sub-channel adjacent in upward/downward direction in the same main channel,

the control unit references the channel information stored in the memory to thereby select an upward/downward adjacent sub-channel in the main channel through which a broadcast is being received currently, each time the operation key is operated, and

the control unit searches the main channel in reception currently in circulation or reciprocation for the sub-channel to be selected when there is not the upward/downward adjacent sub-channel in the channel information.

3. The channel selection device used in the digital/analog broadcasting receiver according to claim 2, further comprising an OSD (On-Screen Display) output circuit for providing OSD display of a list of the channel information stored in the memory in such a state

that the digital and analog broadcasts thereof are mixed, on the display device wherein the list of the channel information is displayed in a vertically/horizontally arranged state in order of channel number, and a cursor for selecting the channels as interlocked with the instruction by use of the operation key is indicated in the list of the channels displayed on the display device in an OSD manner.

4. The digital/analog broadcasting receiver equipped with the channel selection device according to claim 2, for receiving a digital broadcast according to the ATSC (Advanced Television Systems Committee) standard and an analog broadcast according to the NTSC (National Television Systems Committee) Standard.